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**“जानने का अधिकार, जीने का अधिकार”**

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

**“पुराने को छोड़ नये के तरफ”**

Jawaharlal Nehru

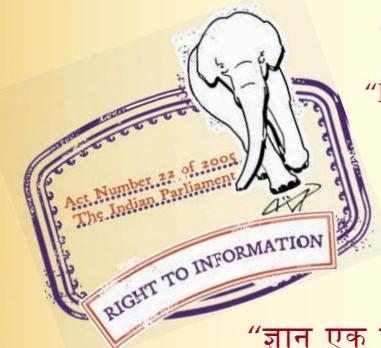
“Step Out From the Old to the New”

IS 8534-2 (1995): Mine tub couplings and drawbars, Part 2:  
C link and D-shackle type [MED 8: Mining Techniques and  
Equipment]

**“ज्ञान से एक नये भारत का निर्माण”**

Satyanaaran Gangaram Pitroda

“Invent a New India Using Knowledge”



**“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”**

Bhartṛhari—Nītiśatakam

“Knowledge is such a treasure which cannot be stolen”





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18 8534 ( Part 2 ) : 1995

भारतीय मानक

REAFFIRMED

खान टब युग्मन और कर्षण शलाकाएँ

भाग 2 सी-लिंक और डी-शैक्ल टाईप

( पहला पुनरीक्षण )

*Indian Standard*

MINE TUB COUPLINGS AND DRAWBARS

PART 2 C-LINK AND D-SHACKLE TYPE

( *First Revision* )

UDC 622.625.24-013

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BUREAU OF INDIAN STANDARDS  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

## **FOREWORD**

This Indian Standard ( Part 2 ) ( First Revision ) was adopted by the Bureau of Indian Standards after the draft finalized by the Mine Transportation Sectional Committee had been approved by the Heavy Mechanical Engineering Division Council.

This standard on mine tub couplings is one of the series of standards on mine tub couplings. Other parts of this standard are:

IS 8534 ( Part 1 ) : 1994	Mine tub couplings and drawbars : Part 1 General requirements ( <i>first revision</i> )
- IS 8534 ( Part 3 ) : 1995	Mine tub couplings and drawbars : Part 3 R-shackle and link type ( <i>first revision</i> )
IS 8534 ( Part 4 ) : 1995	Mine tub couplings and drawbars : Part 4 F-shackle and link type ( <i>first revision</i> )
IS 8534 ( Part 5 ) : 1995	Mine tub couplings and drawbars : Part 5 Drawbars
IS 8534 ( Part 6 ) : 1995	Mine tub couplings and drawbars : Part 6 Hook and D-shackle type

This standard ( Part 2 ) was first published in 1977. It was covering requirements for hook and D-shackle type of coupling. Experience in the use of this coupling indicated that it is difficult to maintain a straight pull through drawbar of the tub. Hence, the use of this type of coupling is being discontinued and is being replaced by the coupling covered by this Indian Standard.

Other important change involved in this revised version is the application of only one size of coupling for use up to a safe working load of 50 kN. Earlier three different sizes for 10, 20 and 30 kN safe working load were specified in this standard.

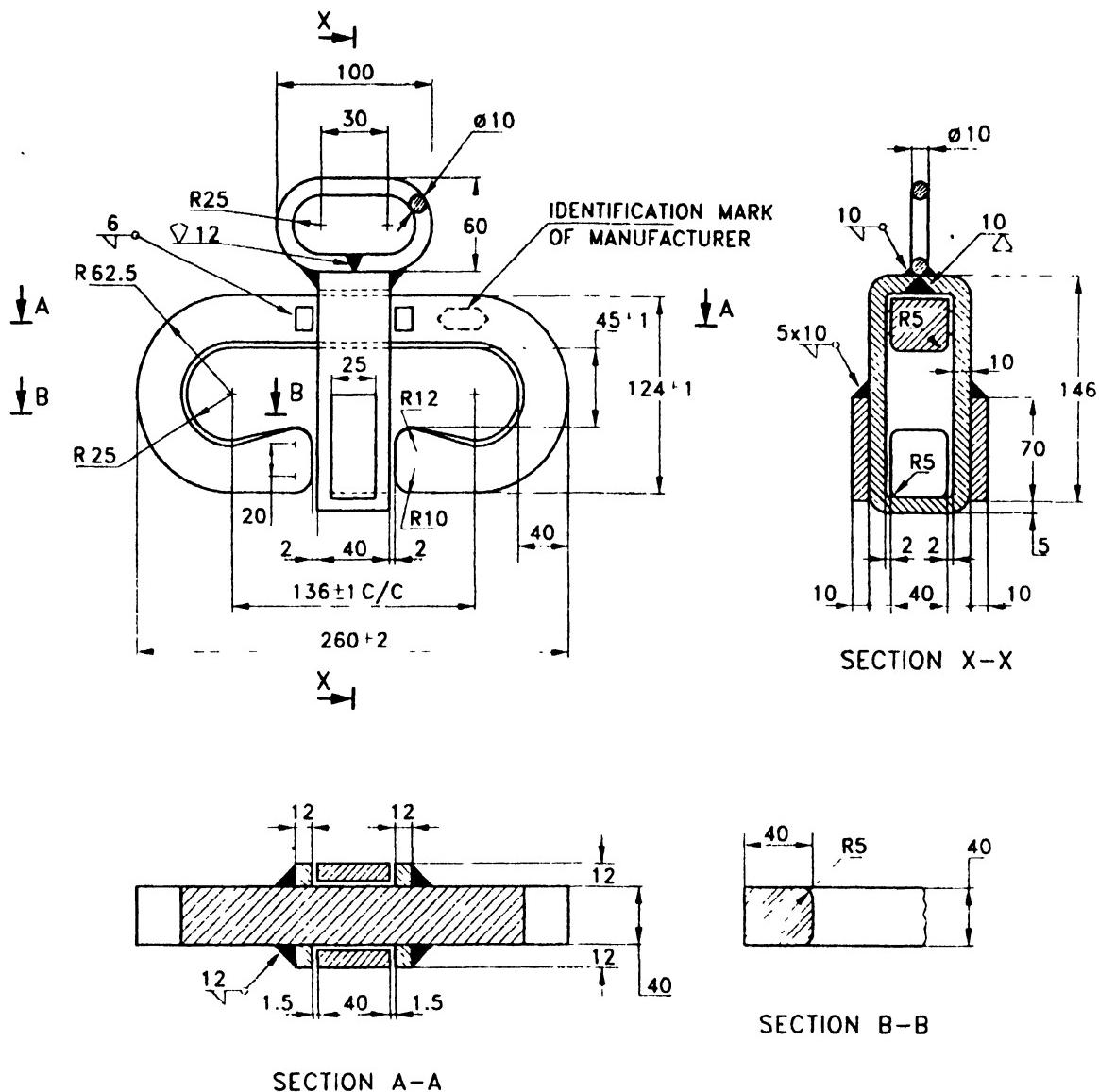
Couplings specified in this standard are recommended for use in conjunction with lapped type ( Type A ) drawbars specified in IS 8534 ( Part 5 ) : 1995.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**AMENDMENT NO. 1 JANUARY 2005**  
**TO**  
**IS 8534 (PART 2) : 1995 MINE TUB COUPLINGS AND DRAWBARS**  
**PART 2 C-LINK AND D-SHAKLE TYPE**

*(First Revision)*

(Page 4, Fig. 4) — Substitute the following for the existing figure:



All dimensions in millimetres.

FIG. 4 C-LINK

*Indian Standard***MINE TUB COUPLINGS AND DRAWBARS****PART 2 C-LINK AND D-SHACKLE TYPE***(First Revision)***1 SCOPE**

This Indian Standard lays down the requirements for C-link and D-shackle type mine tub couplings used for connecting mine tubs in a set of tubs and having a maximum safe working load of 50 kN.

**2 REFERENCE**

The Indian Standard IS 8534 ( Part 1 ) : 1994 'Mine tub couplings and drawbars: Part 1 General requirements ( *first revision* )' is a necessary adjunct to this Indian Standard.

**3 DIMENSIONS**

**3.1 Assembly and Nomenclature** — See Fig. 1.

**3.2 D-Shackle** — See Fig. 2.

**3.3 Pin of D-Shackle** — See Fig. 3.

**3.4 C-Link** — See Fig. 4.

**4 TOLERANCES**

Tolerances on various components of the C-link and D-shackle type mine tub couplings shall be as follows:

<i>Component</i>	<i>Tolerance</i>
Link and shackle	+ 5 percent 0
Diameter of pins	— 0·1 mm — 0·25 mm
Pin holes	+ 1·0 mm 0

**5 DESIGNATION**

A mine tub coupling of C-link and D-shackle type conforming to this standard shall be designated as:

Tub Coupling, C-link and D-shackle type  
IS 8534 ( Part 2 )

**6 GENERAL REQUIREMENTS**

Mine tub couplings of C-link and D-shackle type shall conform in all respects with IS 8534 ( Part 1 ) : 1994.

**7 MARKING**

**7.1** Each coupling shall be permanently and legibly marked on a non-vital component with the following information:

- a) Manufacturer's identification mark,
- b) Safe working load in kN,
- c) Type of heat treatment given, and
- d) Identification mark bearing with manufacturer's certificate of test and examination [ see Annex A of IS 8534 ( Part 1 ) : 1994 ]

**7.1.1** The stamps used for marking shall be of 5 mm size. Care shall be taken that the indentation is neither too sharp nor excessive in depth.

**7.2 BIS Certification Marking**

The C-link and D-shackle type mine tub coupling may also be marked with Standard Mark.

**7.2.1** The use of the Standard Mark is governed by the provisions of *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

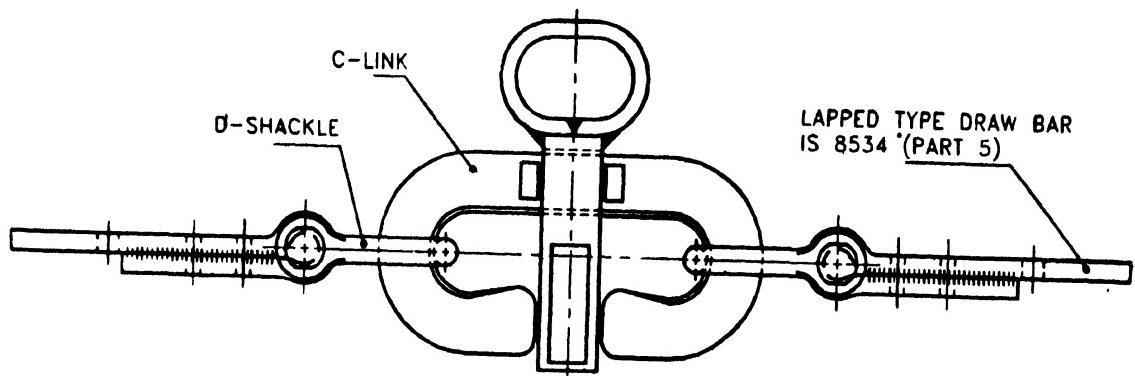
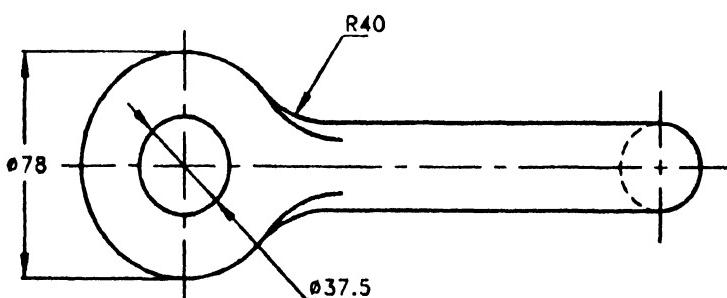
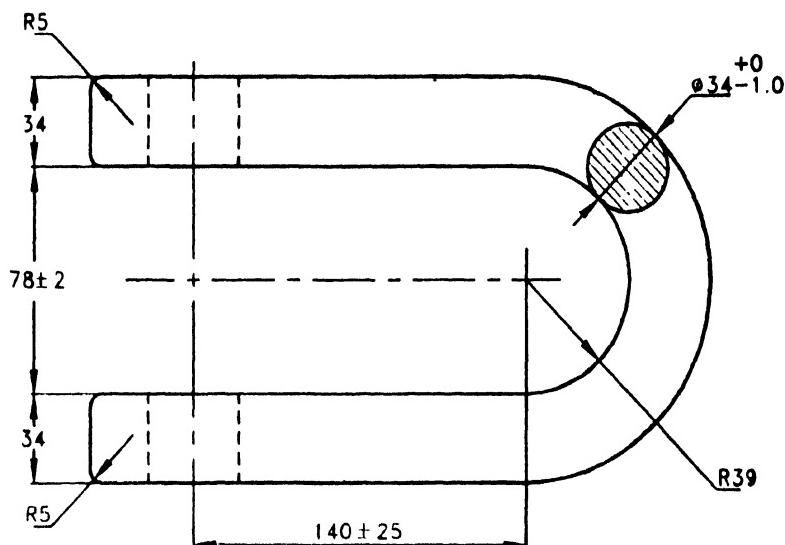
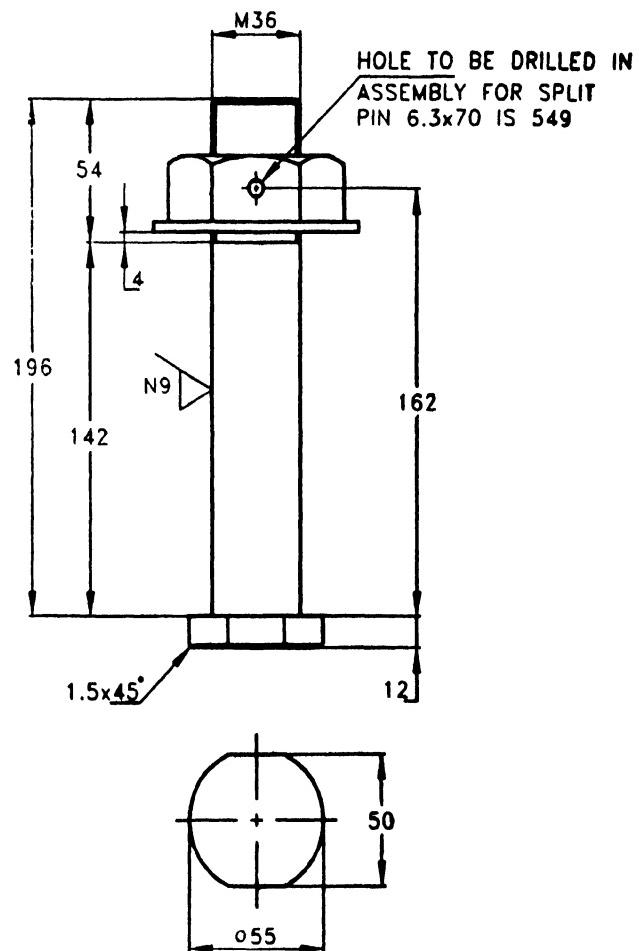


FIG. 1 ASSEMBLY AND NOMENCLATURE



All dimensions in millimetres.

FIG. 2 D-SHACKLE



All dimensions in millimetres.

FIG. 3 PIN OF D-SHACKLE

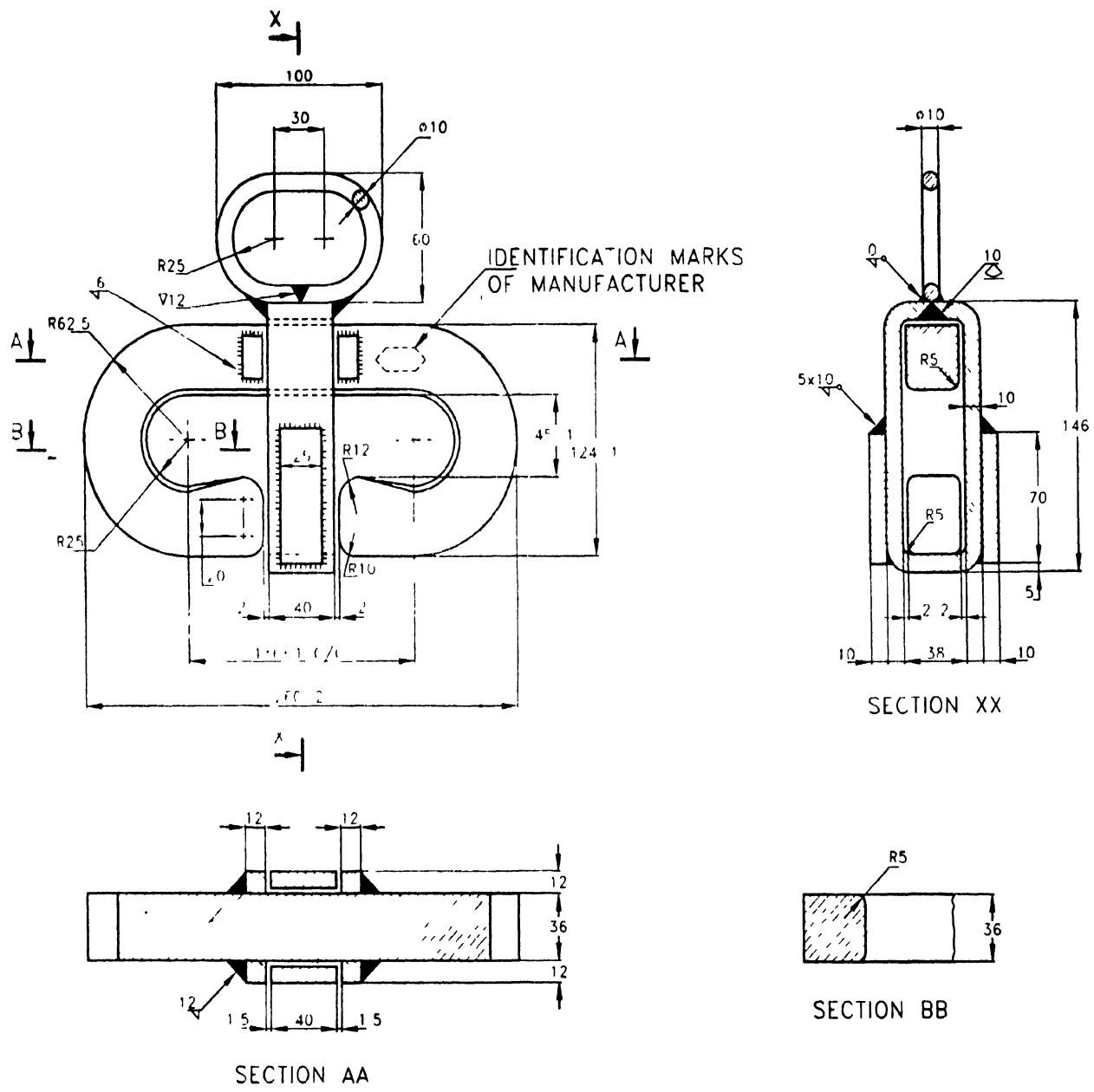


FIG. 4 C-LINK

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### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

## BUREAU OF INDIAN STANDARDS

### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002  
Telephones : 331 01 31, 331 13 75

Telegrams : Manaksantha  
( Common to all offices )

### Regional Offices :

Telephone

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg  
NEW DELHI 110002

{ 331 01 31  
331 13 75

Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola  
CALCUTTA 700054

{ 37 84 99, 37 85 61  
37 86 26, 37 86 62

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022

{ 60 38 43  
60 20 25

Southern : C. I. T. Campus, IV Cross Road, MADRAS 600113

{ 235 02 16, 235 04 42  
235 15 19, 235 23 15

Western : Manakalaya, E9 MIDC, Marol, Andheri ( East )  
BOMBAY 400093

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